AMENDMENT

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

1. (Currently Amended)   A computing device within a network that adapts parameters of an

automatic speech recognition (ASR) system embedded on a mobile device, the computing device

comprising:

means for receiving user account-specific adaptation data associated with ASR from a

mobile device;

means for generating new ASR adaptation parameters using the user account-specific

adaptation data transmitted from the mobile device ~~when a communication channel with the~~

~~mobile device becomes available~~; and

means for transmitting the new ASR adaptation parameters to the mobile device when a

communication channel with the mobile device becomes available, wherein the new ASR

adaptation parameters provide improved ASR for the embedded ASR system.

2. (Original) The computing device of claim 1, wherein the means for generating new ASR

adaptation parameters further comprises network-based adaptation algorithms that estimate the

adaptation parameters within the adaptation data based on speech utterances and ASR results

obtained from the ASR system on the mobile device.

3. (Original) The computing device of claim 2, wherein the means for generating new ASR

adaptation parameters further comprises means for generating the ASR adaptation parameters

after determining that a threshold amount of transmitted information has been received from the

mobile device.

4. (Original) The computing device of claim 1, further comprising:

means for synchronizing network-based account-specific adaptation data with the

transmitted user account-specific adaptation data received from the mobile device, wherein prior

to generating new ASR adaptation parameters on the computing device, the means for

synchronizing synchronizes the adaptation data.

5. (Original)   The computing device of claim 1, wherein the means for receiving user account-

specific adaptation data associated with ASR from a mobile device further comprises means for

receiving multi-modal input as part of the user account-specific adaptation data.

6. (Original)   The computing device of claim 5, wherein the multi-modal input is utilized to

generate the new ASR adaptation parameters.

7. (Currently Amended)   A mobile device that communicates with a network via a wireless

link, the mobile device comprising:

means for performing natural language automatic speech recognition (ASR);

means for receiving and storing user data associated with communication between a user

and the mobile device;

means for transmitting the user data over a wireless link to a computing device associated

with the wireless network ~~when a communication channel becomes available~~, the computing

device synchronizing the transmitted user data with stored user account-specific adaptation data

and generating new ASR adaptation parameters based on the user data; and

means for receiving the new ASR adaptation parameters from the computing device

when a communications channel becomes available between the computing device and the

mobile device, wherein the new ASR adaptation parameters improve ASR performance.

8. (Original)   The mobile device of claim 7, wherein the computing device revises the user

account-specific adaptation data using network-based adaptation algorithms that estimate the

adaptation parameters within the adaptation data based on the transmitted user data.

9. (Original) The mobile device of claim 8, wherein the computing device revises the

adaptation data after determining that a sufficient amount of transmitted user data has been

received from the mobile device.

10. (Original) The mobile device of claim 7, wherein the computing device, prior to revising the

user account-specific adaptation data, synchronizes the adaptation data.

11. (Original) The mobile device of claim 7, wherein the received user data further comprises

data associated with multi-modal communication between the user and the mobile device.

12. (Original) The mobile device of claim 11, wherein the multi-modal communication includes

at least user utterances and user stylus input or keyboard input.

13. (Currently Amended)   A method of generating new automatic speech recognition (ASR)

parameters on a mobile device, the mobile device having an embedded ASR system, the method

comprising:

storing a user account-specific adaptation data associated with ASR on a computing

device associated with a wireless network that at least intermittently communicates with a

mobile device;

generating new ASR adaptation parameters based on transmitted information from the

mobile device ~~when a communication channel between the computing device and the mobile~~

~~device becomes available~~; and

transmitting the new ASR adaptation parameters to the mobile device when a

communication channel between the computing device and the mobile device becomes available,

wherein the embedded ASR system more accurately recognized user utterances.

14. (Original) The method of claim 13, wherein generating new ASR adaptation parameters

further comprises utilizing network-based adaptation algorithms that estimate the ASR

adaptation parameters within the adaptation data based on speech utterances and ASR results

obtained from the ASR system on the mobile device.

15. (Original) The method of claim 14, wherein generating new ASR adaptation parameters

further comprises revising the adaptation data after determining that a sufficient amount of

uploaded information has been received from the mobile device.

16. (Original) The method of claim 13, further comprising:

synchronizing the network-based account-specific adaptation data with the transmitted

adaptation data received from the mobile device, wherein prior to generating new ASR

adaptation parameters on the computing device, the synchronizing step synchronizes the

adaptation data.

17. (Original) The method of claim 13, wherein storing a user account-specific adaptation data

associated with ASR further comprises storing user adaptation data associated with multi-modal

communication between the user and the mobile device.

18. (Original) The method of claim 17, wherein the multi-modal communication comprises at

least user speech utterances and stylus or keyboard input.

19. (Currently Amended)   A method of generating new automatic speech (ASR) parameters

associated with an embedded ASR system on a mobile device, the method comprising:

performing automatic speech recognition (ASR) on the mobile device;

receiving and storing ASR data associated with speech communication between a user

and the mobile device;

transmitting the ASR data over a wireless link to a computing device associated with the

wireless network ~~when a communication channel becomes available~~, the computing device

synchronizing the transmitted ASR data with stored user account-specific adaptation data and

generating new ASR adaptation parameters based on the ASR data; and

receiving the new ASR adaptation parameters from the computing device when a

communications channel becomes available between the computing device and the mobile

device, wherein the new ASR adaptation parameters are used for improving ASR performance

on the mobile device.

20. (Original) The method of claim 19, wherein the computing device revises the user account-

specific adaptation data using network-based adaptation algorithms that estimate the ASR

adaptation parameters within the adaptation data based on the transmitted ASR data.

21. (Original) The method of claim 20, wherein the computing device revises the adaptation

data after determining that a sufficient amount of transmitted ASR parameters has been received

from the mobile device.

22.   The method of claim 19, wherein the computing device, prior to revising the user

account-specific adaptation data, synchronizes the adaptation data.

23.   The method of claim 19, wherein the ASR parameters are associated with a statistical

analysis of raw speech data.